

Remarks

This Amendment is in response to the Office Action dated **July 17, 2008**.

Claims 44-61, 63-70 and 73 have been canceled without prejudice. These claims are drawn to a non-elected invention. Applicant reserves the right to prosecute these claims in a divisional application.

Claims 14, 18-20 and 38 have also been withdrawn as being directed to non-elected species. Applicant reserves the right to rejoin the non-elected species under 37 CFR §1.141 should a generic linking claim be found allowable.

Rejections

35 U.S.C. §102(b)

Saito et al.

Claims 1-4, 6-9, 12, 13, 15, 16, 17, 22-24, 28-31, 35-37, 39,40 and 42 are rejected under 35 U.S.C. §102(b) as anticipated by Saito et al (5,429,590). The Office Action refers to the Abstract, column 2, lines 33-47, column 3, line 50, to column 4, line 46, and Example 14.

Independent claims 1 and 28 are both directed to lubricious compositions suitable for use on medical device, the lubricious composition including, at least one polymerizable alkoxyated (meth)acrylate compound having at least two acrylate groups per molecule of the compound and a water solubility of about 15% or greater and at least one second component which provides lubricity when wet.

Applicant has amended independent claims 1 and 28 to recite that the polymerizable alkoxyated (meth)acrylate compound is selected from the group consisting of

alkoxylated trimethylol alkane tri(meth)acrylates, alkoxylated neopentyl glycol di(meth)acrylates, alkoxylated pentaerythritol tetra(meth)acrylates, trimethylolpropane ethoxylate (1 EO/OH) methyl ether di(meth)acrylate, aromatic alkoxylated (meth) acrylates having a water solubility of about 15% or greater, and mixtures thereof. No new matter has been added.

Saito et al. disclose:

Examples of the alkoxyalkyl acrylate which is one of the essential monomers of the medial water-absorptive polymer of the present invention are 2-methoxyethyl acrylate, 2-ethoxyethyl acrylate, 2-butoxyethyl acrylate, 3-methoxypropyl acrylate, 3-methoxybutyl acrylate, 3-ethoxypropyl acrylate, and 3-ethoxybutyl acrylate. Further, alkoxyalkylene glycol acrylates such as butoxyethylene glycol acrylate, 2-(2-ethoxyethyl)ethylene glycol acrylate, methoxytriethylene glycol acrylate, methoxydipropylene glycol acrylate, etc., can be used as the monomer. In these monomers, 2-methoxyethyl acrylate, etc., having a low glass transition point and a high hydrophilic property is preferably used in the present invention.

Col. 2, lines 33-47

As can be seen, Saito et al. fail to disclose the specific alkoxylated trimethylol alkane tri(meth)acrylates, alkoxylated neopentyl glycol di(meth)acrylates, alkoxylated pentaerythritol tetra(meth)acrylates, trimethylolpropane ethoxylate (1 EO/OH) methyl ether di(meth)acrylate and aromatic alkoxylated (meth) acrylates having a water solubility of about 15% or greater recited in claims 1 and 28 as amended.

Claims 2-4, 6-9, 12, 13, 15, 16, 17 and 22-24 depend from claim 1 and are not anticipated by Saito et al. for at least the reasons that claim 1 is not anticipated by Saito et al.

Claims 29-31, 35-37, 39, 40 and 42 depend from claim 28 and are not anticipated by Saito et al. for at least the reasons that claim 28 is not anticipated by Saito et al.

Applicant respectfully requests withdrawal of the rejection of claims 1-4, 6-9, 12, 13, 15, 16, 17, 22-24, 28-31, 35-37, 39, 40 and 42 are rejected under 35 U.S.C. §102(b) as anticipated by Saito et al (5,429,590).

Buscemi et al.

Claims 1-9, 12, 16, 17, 21-23, 27-32, 34-36 and 41-43 are rejected under 35 U.S.C. §102(b) as anticipated by Buscemi et al. (5,693,034).

Applicant traverses the rejection.

Independent claims 1 and 28 are both directed to lubricious compositions suitable for use on medical device, the lubricious composition including, at least one polymerizable alkoxyated (meth)acrylate compound having at least two acrylate groups per molecule of the compound and a water solubility of about 15% or greater and at least one second component which provides lubricity when wet.

Applicant has amended independent claims 1 and 28 to recite that the polymerizable alkoxyated (meth)acrylate compound is selected from the group consisting of alkoxyated trimethylol alkane tri(meth)acrylates, alkoxyated neopentyl glycol di(meth)acrylates, alkoxyated pentaerythritol tetra(meth)acrylates, trimethylolpropane ethoxylate (1 EO/OH) methyl ether di(meth)acrylate, aromatic alkoxyated (meth) acrylates having a water solubility of about 15% or greater, and mixtures thereof. No new matter has been added.

It is asserted in the Office Action that:

Buscemi et al. specifically teach that alkoxyated di(meth)acrylates, such as triethylene glycol di(meth)acrylate, tetra ethylene glycol di(meth)acrylate and polyethylene glycol di(meth)acrylate, are equivalent to neopentyl glycol diacrylate in the disclosed compositions.. The compositions taught by Buscemi et al comprising an alkoxyated di(meth)acrylate anticipate the instantly claimed compositions.

Office Action, pages 2-3

Applicants submit that Buscemi et al. disclose neopentyl glycol diacrylate (NPG). ethylene glycol di(meth)-acrylate, 1,3-propylene glycol di(meth)acrylate, 1,4-butanediol di(meth)acrylate, 1,6-hexanediol di(meth)acrylate, diethylene glycol di(meth)acrylate, triethylene

glycol di(meth)acrylate, tetraethylene glycol di(meth)acrylate, polyethylene glycol di(meth)acrylate, and neopentyl glycol di(meth)acrylate.

None of these compounds are equivalent to alkoxylated trimethylol alkane tri(meth)acrylates, alkoxylated neopentyl glycol di(meth)acrylates, alkoxylated pentaerythritol tetra(meth)acrylates, trimethylolpropane ethoxylate (1 EO/OH) methyl ether di(meth)acrylate, aromatic alkoxylated (meth) acrylates having a water solubility of about 15% or greater, as recited in independent claims 1 and 28 as amended.

Buscemi et al. do not anticipate claims 1 and 28 as amended.

Claims 2-9, 12, 16, 17, 21-23 and 27 depend from claim 1 and are not anticipated by Buscemi et al. for at least the reasons that claim 1 is not anticipated by Buscemi et al.

Claims 29-32, 34-36 and 41-43 depend from claim 28 and are not anticipated by Buscemi et al. for at least the reasons that claim 28 is not anticipated by Buscemi et al.

Applicants respectfully request withdrawal of the rejection of claims 1-9, 12, 16, 17, 21-23, 27-32, 34-36 and 41-43 under 35 U.S.C. §102(b) as anticipated by Buscemi et al (5,693,034).

35 U.S.C. §103(a)

Claims 10, 11, 13, 15, 24, 25, 33, 37, 39 and 40 have been rejected under 35 U.S.C. §103(a) as being obvious over Buscemi et al (5,693,034), as applied to claims 1-9, 12, 16, 17, 21-23, 27-32, 34-36 and 41-43 above, and further in view of Bac et al (5,667,735). It is asserted in the Office Action that:

Buscemi et al disclose vinyl monomers such as glyceryl propoxy triacrylate, diacrylates such as di-, tri-, tetra- or poly-ethylene glycol di(meth)acrylates and neopentyl glycol diacrylate (column 2, lines 56, to column 3, line 3). A free radical

initiator, such as azobisisobutyronitrile, is employed and curing can be by UV light exposure (column 3, lines 12-13 and lines 32-43)/

Bae et al disclose coatings for ophthalmic devices. The compositions comprise polyacryloylated alkane polyols, alkoxyated alkane polyols having at least three acrylate groups, such as ethoxylated trimethylolpropane triacrylate, a photoinitiator and other additives (column 3, lines 37-57, and column 5, lines 19-42). The photoinitiators taught include Darocure 1173, Irgacure 500 and Irgacure 907 (2-methyl-1-[4-(methylthio)phenyl]-2-morpholino-propanone-1) (column 5, lines 43-50). Additional photoinitiators, including azobisisobutyronitrile, are taught in column 11, lines 18-39.

Office Action, pages 3-4

Applicant disagrees.

Applicant submits that one of ordinary skill in the art would not combine Bae et al. with Buscemi et al.

Buscemi et al. is directed to “[a] polymer network useful as a lubricous coating, the polymer network comprising a reaction product of a vinyl prepolymer and an uncrosslinked hydrogel retained within the reaction product such that the network exhibits a greater lubricity when wet.” Abstract.

Bae et al., on the other hand, is directed to, “. . . a procedure for providing abrasion and scratch resistance for ophthalmic and other castable plastic lenses.” Summary of the Invention. The disclosure of Bae et al. is replete with reference to “hardened organic material” that renders the film abrasion resistant. See, for example, claim 1 and Summary of the Invention. Bae et al. is silent as to any of the compositions therein being employed in a network that exhibits greater lubricity when wet.

Furthermore, Bae et al. tests the adhesion of their coating by “. . . soaking the lens sample in boiling salt water for one hour and then subjecting the coating to cross-hatch testing as described in ASTM D-3359. Acceptable adhesion means that none of the coating was removed

during the test.” See column 14, lines 39-44. Such compositions would simply not be expected to provide lubricity when wet.

One of ordinary skill in the art would simply not combine the hard, abrasion resistant coatings employed for ophthalmic lenses disclosed by Bae et al. with Buscemi et al. wherein it is desirable that the compositions exhibit lubricity when wet, regardless of the components that Bae et al. is employing.

Applicant submits that while both of these references may be directed to coatings, the differences in function are so different that one of skill in the art simply would not combine them.

While Patent Office classification of references and the cross-references in the official search notes of the class definitions are some evidence of “nonanalogy” or “analogy” respectively, the court has found “the similarities and differences in structure and function of the inventions to carry far greater weight.” *In re Ellis*, 476 F.2d 1370, 1372, 177 USPQ 526, 527 (CCPA 1973).

MPEP 2141.01(a)

The teachings of Bae et al. wherein hardness and abrasion resistance are desired are simply not relevant to the problems encountered for a coating which becomes lubricious when wet. The teachings of each reference combined, must be pertinent to the problems relevant to the inventor. See MPEP 2141.01(a). For example, Applicant is selecting (meth)acrylates that provide greater water solubility. See page 5, lines 11-12. Clearly, for Bae et al. wherein the coatings must withstand boiling in water, such water solubility is undesirable. See column 14, lines 39-44.

Furthermore, the Supreme Court in *KSR* determined that not only must one of ordinary skill in the art be able to implement a predictable variation, there must be some readily recognized benefit to doing so.

TSM test captures a helpful insight: A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art. Although common sense directs caution as to a patent application claiming as innovation the combination of t]lo known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the art to combine the elements as the new invention does. Inventions usually rely upon building blocks long since uncovered, and claimed discoveries almost necessarily will be combinations of what, in some sense, is already known.

KSR International Co. v. Teleflex Inc., 550 U.S. __, __, 82 USPQ2D 1385, 1389 (U.S. 2007).

See also MPEP 2142.

Applicants submit that without using hindsight, employing Applicant's own invention as a road map, one of ordinary skill in the art would simply not combine the hard, abrasion resistant coatings of Bae et al., wherein it is desirable that the coatings withstand a boiling salt water test for one hour, with Buscemi et al., wherein lubricious coatings that become slippery when wet are desired. "This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention." *Ruiz v. A.B. Chance Co.*, 69 USPQ2D 1686, 1690 (Fed. Cir. 2004).

Hindsight reconstruction is impermissible even after KSR. "The TSM test captures a helpful insight: A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art." *KSR International Co. v. Teleflex Inc.*, 82 USPQ2D at 1389.

Applicant respectfully requests withdrawal of the rejection of claims 10, 11, 13, 15, 24, 25, 33, 37, 39 and 40 under 35 U.S.C. §103(a) as being unpatentable over Buscemi et al (5,693,034), as applied to claims 1-9, 12, 16, 17,21-23, 27-32, 34-36 and 41-43 above, and further in view of Bae et al (5,667,735).

CONCLUSION

Claims 1-13, 15-17, 21-37, 39-43 and 71 are pending in the application. Claims 14, 18-20, 38, 44-61, 63-70 and 73 have been withdrawn from consideration. Applicant has addressed each of the issues presented in the Office Action. Based on the foregoing, Applicant respectfully requests reconsideration and an early allowance of the claims as presented. Should any issues remain, the attorney of record may be reached at (952)563-3011 to expedite prosecution of this application.

Respectfully submitted,

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